

EXHIBIT 19

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division

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ROSY GIRON DE REYES, :
et al., :
Plaintiffs, : Civil No.:
v. : 1:16cv563-TSE-TCB
WAPLES MOBILE HOME PARK LIMITED :
PARTNERSHIP, :
et al., :
Defendants. :

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Videoconference Deposition of
WILLIAM A.V. CLARK, Ph.D.
McLean, Virginia
Thursday, December 22, 2016
4:05 p.m.

Job No: 130604

Pages: 1 - 87

Reported by: Kelly Carnegie, CSR, RPR

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1 subject was an attempt to estimate the undocumented
2 population in a particular geographical area?

3 A There may be other publications which have
4 certainly been involved with discussions of the
5 undocumented population. Your specific question
6 about whether I have estimated it for specific
7 areas, I don't believe that I have articles that
8 have done that.

9 Q Have you engaged in that type of analysis
10 as an expert witness on any occasion other than this
11 case?

12 A I believe it was part of the Koreatown
13 study. We were concerned with people who were
14 documented or not, but I don't think that that
15 became an essential part of that case.

16 Q In the reports in this case, Professor
17 Clark, there's a term that's used called "margin of
18 error." Can you define that term for me.

19 A When statisticians and demographers make
20 estimates using samples, they recognize that there
21 is some -- because it's not a count, there is some
22 error in the result, and we provide a range around

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1 national level, you have some smaller number at the
2 local level, and we've agreed that the margin of
3 error would be greater at the smaller area than at
4 the national.

5 Q In attempting to estimate the undocumented
6 population as we've defined it, are there particular
7 challenges to that type of estimate as opposed to
8 estimating another segment of the population?

9 A I believe that's true.

10 Q What are the difficulties, if you will, in
11 estimating the undocumented population?

12 A Well, because they're undocumented, some
13 of them prefer not to be measured in census
14 estimations. So getting an accurate count is more
15 difficult for a population that is less willing,
16 less wanting to be measured.

17 Q As a demographer, how do you deal with
18 that?

19 A Well, there's a huge literature and it's
20 been discussed at length, and both Dr. Weinberg and
21 I reference some of the important people, Fasel,
22 Warren, Word, all these people, Peter Morrison, who

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1 have worked on this project of how to estimate the
2 undocumented population, and now the demographers at
3 The Center for Migration Studies have done a very
4 good job of coming up with pretty good estimates of
5 the national and local undocumented populations.

6 Q So The Center for Migration Studies has
7 estimated the undocumented population at the
8 national level for the United States, correct?

9 A Yes.

10 Q Is it also true that CMS, who is -- I'll
11 refer to them as The Center for Migration Studies --
12 has acknowledged a nine percent margin of error with
13 respect to its estimate of the undocumented
14 population at the national level?

15 A That's correct.

16 Q Has CMS estimated the margin of error for
17 its estimates at smaller geographical areas such as
18 a state?

19 A They have not.

20 Q Do you know why they have not done that?

21 A I think the -- they say it's difficult
22 enough to try and get estimates of the undocumented

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1 Q Is that what's been referred to in some of
2 the reports -- and I'll use the acronym -- PUMA,
3 P-U-M-A?

4 A Yes, public use microdata area.

5 Q So that's the smallest geographical area
6 that CMS will provide an estimate or has provided an
7 estimate for the undocumented population, correct?

8 A That is the smallest area to which they
9 have published estimates.

10 Q Okay. Are there any other entities that
11 have estimated the undocumented population at a
12 geographical area smaller than a PUMA?

13 A Not that I know of.

14 Q Do you know why that is?

15 A It's a very time consuming and tedious
16 activity, and I don't think the other two major
17 groups, The Pew Foundation and the -- I can't recall
18 the name -- the Migration Studies Institute --

19 Q Yeah.

20 A -- have done that.

21 Q In the expert report that you provided in
22 this case, you adopted the margin of error that the

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1 American Community Survey attached to the estimate
2 of the total number of Hispanics in the census tract
3 at issue. Is that correct?

4 A That's correct.

5 Q Do you know how ACS determined that margin
6 of error?

7 A Certainly when I was reviewing the
8 document, I could have given you a much more
9 specific answer. They used the procedures the ACS
10 uses for all of its margins of error, and they pass
11 that down to the local unit, and that's their best
12 estimate of a range for that small population in a
13 census tract. In this case I think it was 26
14 percent.

15 Q All right. At what point does the margin
16 of error cause you as a demographer to question the
17 reliability of the estimate?

18 A Well, I think we have to be clear that the
19 issue and the importance is -- the point is not the
20 margin of error. The margin of error gives us a
21 guide as to what the range might be. But in the
22 end, all statisticians and demographers are

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1 piece of information we have about Hispanics and
2 that I used to apply to my undocumented estimate so
3 that I could give you a range. In fact, I believe
4 my point estimate is about correct.

5 Q Well, the ACS 26 percent margin of error
6 has nothing to do with the undocumented population,
7 correct?

8 A It does to the extent that undocuments
9 are -- the undocumented are members of that Hispanic
10 population.

11 Q But the ACS doesn't differentiate, it
12 simply has an estimate of the total Hispanic
13 population, right?

14 A That's correct.

15 Q And that had a margin of error of 26
16 percent, correct?

17 A Correct.

18 Q And you attempted to estimate a sub-group
19 of undocumented Hispanics, correct?

20 A Yes.

21 Q Which is less certain, as you've already
22 testified, correct?

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1 A Correct.

2 Q So shouldn't the margin of error go up?

3 A If you had some basis to change it, you
4 could make that adjustment. That would increase the
5 number.

6 But I make two points in response to you:
7 We have another statistician who has also provided a
8 point estimate, without a range of error, I might
9 add. So we don't know what the range of error of
10 Dr. Weinberg's point is. But both point estimates
11 are within a relatively narrow range. Whether the
12 margin of error is actually 26 percent, we can only
13 rely on the fact that that's our best information at
14 this point.

15 Q Well, you would agree, Professor Clark,
16 that Mr. Weinberg believes that your estimate is
17 completely unreliable because of the margin of
18 error, correct?

19 A He says that in his report.

20 Q So the issue isn't so much the point
21 estimate, but whether it's sufficiently reliable,
22 correct?

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1 Migration Studies, but confirmed by the studies from
2 the Pew Research Center and from the Migration
3 Studies Institute.

4 Q But the CMS doesn't have any estimate of
5 the undocumented population at the tract level,
6 correct?

7 A That's correct.

8 Q So then you did not rely upon CMS data for
9 your ultimate conclusion in this case, right?

10 A No, that's not correct. I used the CMS
11 data from the PUMA to estimate what the undocumented
12 population is in the tract, that tract as part of
13 the PUMA.

14 Q What's the population size in the PUMA
15 that you relied upon?

16 A I don't have it in front of me, but it's a
17 large number.

18 Q Well over 100,000, correct?

19 A I believe so.

20 Q And the census Tract 4406, that population
21 is less than 4,000, correct?

22 A Yes.

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1 A And whatever is in the response to Dr.
2 Weinberg, yes.

3 MR. DINGMAN: Why don't we take a short
4 break and let me reorganize. I think we can finish
5 up hopefully in the next 20, 30 minutes.

6 THE WITNESS: Okay.

7 MR. KIM: Sounds good.

8 (A brief recess was had from 5:34 p.m. to
9 5:42 p.m.)

10 MR. DINGMAN: Are we set to resume?

11 THE WITNESS: Yes.

12 MR. DINGMAN: Okay.

13 BY MR. DINGMAN:

14 Q Professor Clark, I'd like you to turn to
15 page 5 of your report. In the last paragraph before
16 the section with the heading Geography, in the first
17 sentence you state, "In sum, comparing the
18 undocumented population in Fairfax County and Census
19 Tract 4406 to other groups at the county and the
20 census tract level reveals a disparate impact at
21 both levels." What are the other groups at the
22 county that you refer to in that statement?

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1 A Non-Hispanic populations.

2 Q And why do you say there's a disparate
3 impact at both levels?

4 A At both county and census tract levels.

5 Q So the other groups are just
6 non-Hispanics, or are they the non-Hispanic
7 undocumented population that you're referring to
8 here?

9 A Non-Hispanic populations.

10 Q So that statement has nothing to do with
11 whether they're documented or not?

12 A No. I misspoke. That's drawn from the
13 table before where in fact I produce an undocumented
14 ratio for the county in the tract of 30.7 and 31.4.

15 Q So I'm still trying to understand the
16 statement here. You said you compared the
17 undocumented population in Fairfax County to other
18 groups at the county. So who were the other groups
19 at the county? The documented population?

20 A No, the undocumented non-Hispanic
21 population.

22 Q Okay. And when you did this report, you

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1 Q In his calculation, Dr. Weinberg took into
2 account the CMS margin of error at the national
3 level of nine percent, correct?

4 A And then he multiplied it up.

5 Q Right. But he took into account the nine
6 percent margin of error that CMS admits to with
7 respect to its national estimates, correct?

8 A Yes.

9 Q You ignored that, correct?

10 A I didn't ignore it. I said that this is
11 the best estimate we have. There is no margin of
12 error provided by CMS. He made a number of
13 assumptions about that for which I can find no
14 basis.

15 Q Well, isn't his assumption pretty
16 straightforward? He started at a national margin of
17 error and took that down to a census tract level?

18 A Not if you just multiplied up by some
19 number, which has no basis that I can find.

20 Q So you don't recall that his basis was
21 looking at the number of foreign-born nationals from
22 the census data?

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1 A He uses that, but that's -- but there's no
2 justification for it. And we're getting away from
3 the point. You're focusing on margins of error, and
4 I keep needing to remind you that we do have a point
5 estimate here. That's the issue. There is an issue
6 of what the margin of error should be, but the point
7 estimate, which both Dr. Weinberg and I got, is a
8 good estimate for the number of undocumented in the
9 census tract. And that I think is the end of the
10 discussion, really, because we've got a point
11 estimate.

12 Perhaps the margin of error should be
13 larger, but the margin of error only gives us a
14 sense of where the point estimate lies. Think of it
15 again, as I said, as a bell curve. Multiple samples
16 will produce most of the results near the point
17 estimate.

18 Q But in order to determine whether a point
19 estimate is reliable, you have to consider the
20 margin of error, correct?

21 A You can consider the margin of error. It
22 gives you a range in which the point estimate could

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1 lie. We've already established the point estimate
2 of undocumented Hispanics in the census tract is not
3 zero, but that's what Dr. Weinberg is claiming.

4 Q What Dr. --

5 A So that makes his result nonsensical.

6 Q Isn't he demonstrating that the estimate
7 has no reliability with his margin of error?

8 A No, no. He's demonstrating that you could
9 get a point estimate of zero under his discussion.
10 That's not possible.

11 Q Let me ask you this question.

12 A The margin of error --

13 Q Go ahead.

14 A The margin of error includes all point
15 estimates.

16 Q As a demographer, can you accept an
17 estimate as reliable without knowing the margin of
18 error associated with the estimate?

19 A You can accept the point estimate. There
20 is a margin of error around it. You may not know
21 exactly what the margin of error is. You can still
22 accept the point estimate. We accept them all the

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1 time. Demographers accept estimates of income, of
2 the proportion of women with levels of fertility.
3 We accept point estimates all the time, both
4 professionally and in the lay public. We don't
5 always have point -- we don't -- in fact, we often
6 do not have margins of error, but we accept them.

7 Q Why does the Census Bureau attach a margin
8 of error to all of its estimates if it's unnecessary
9 to determine the reliability of the estimate?

10 A I didn't say that. The Census Bureau in
11 its great care with lots of mathematical
12 statisticians is concerned to give a range around
13 which their point estimates lie. They want people
14 to be aware that the estimate is somewhere in this
15 range.

16 Q Isn't it true the Census Bureau also wants
17 individuals to be aware that the estimate may not be
18 reliable?

19 A I'm not sure that's a correct statement
20 about the Census Bureau, but we have to see what
21 their documentation says on that.

22 Q Based on your experience, do you

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1 understand that that's the reason they provide a
2 margin of error, to allow others to assess the
3 reliability of their estimates?

4 A That's one of the reasons they do it, and
5 I've used what I believe is a reliable piece of
6 their margins of error, that is, the margin of error
7 for the census tract, which is quite large, 26
8 percent, for my margin of error for the undocumented
9 population. If we're talking only about the
10 Hispanic population, that margin of error is in ACS.
11 The only question is whether it applies to make an
12 estimate of the undocumented population. I believe
13 it does give us the best estimate.

14 Q But in coming to your conclusions, you
15 relied upon the CMS data at the PUMA level, correct?

16 A To estimate the number of undocumented in
17 that tract, I deduced it from the PUMA.

18 But recall again that the other data at
19 the county level is confirmatory of my result at the
20 local level. The fact that I'm getting something
21 similar gives me a great deal of confidence in that
22 value. If the value of the census tract level was

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1 wildly different from the county level, I would be
2 concerned about my point estimate, but I'm not.

3 Q In relying upon the PUMA CMS estimate, you
4 do not know what the margin of error is for that
5 estimate, correct?

6 A I think that question has been asked at
7 least twice before, and I've answered. We don't
8 know the margin of error for the CMS data. CMS did
9 not provide margins of error at the PUMA level.

10 Q How can you as a demographer determine
11 whether their estimate is reliable or not?

12 A They have gone through a complicated
13 process of taking the national data, positing it out
14 to state and to local areas. This is, as mine, the
15 best estimate of the number of undocumented. That
16 is a large team of demographers and statisticians
17 produced this data. It is publicly available now
18 online. I believe it is as reliable data as we can
19 get about the undocumented population.

20 Q Whether it's the most reliable or not, how
21 can you determine whether it's sufficiently reliable
22 to establish, for instance, in this case as a fact

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I, Kelly Carnegie, Certified Shorthand Reporter, Registered Professional Reporter, the officer before whom the foregoing proceedings were taken, do hereby certify that the foregoing transcript is a true and correct record of the proceedings; that said proceedings were taken by me stenographically and thereafter reduced to typewriting under my direction; that reading and signing was requested; and that I am neither counsel for, related to, nor employed by any of the parties to this case and have no interest, financial or otherwise, in its outcome.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal this 27th day of December, 2016.

My commission expires: July 31, 2018


Kelly Carnegie

NOTARY PUBLIC IN AND FOR THE

COMMONWEALTH OF VIRGINIA

Notary Registration Number: 7060756